DOCUMENT RESUME

ED 140 198 CG 011 805

AUTHOR	Wood, Robert A.; And Others
TITLE	Establishing a Career Resource Center.
INSTITUTION	American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.; National Consortium on Competency-Based Staff Development.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Dec 76
NOTE	72p.; For Coordinator's Guide, see CG 011 804 ; Not available in hard copy due to marginal legibility of the original document
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Career Planning; Guidance Personnel; Guides; *Inservice Programs; *Learning Modules; *Needs Assessment; Occupational Choice; Performance Based Education; Planning; *Resource Centers; Secondary Education; *Vocational Counseling; Workshops

ABSTRACT

This module is directed toward working guidance personnel in school settings, grades 7-14, including counselors, administrators, and career specialists. The topic is the founding and/or improvement of Career Resource Centers and the module focuses on a systematic process of implementing this objective. Participants will review the concept of a Career Resource Center, how to identify needs and determine objectives, and learn how to establish priorities, select programs and implement plans. The module is designed as a six-hour workshop to be run by a coordinator. THe module gives an overview of a systematic approach to the establishment of a resource center, then follows with a six-step plan: (1) assessing needs; (2) writing objectives; (3) identifying programs, activities, and services; (4) analyzing requirements for implementation; (5) identifying implementation tasks; and (6) assigning responsibility. Workshop activities to help participants acquire each skill are presented in detail. (Author/BP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED140198

Establishing a Career Resource Center

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

by
Robert A. Wood, Neal Rogers
and Clella Klinge

2

CG 011 805

National Consortium on
Competency-Based Staff Development

National Consortium Members

ANNE UPTON
California State Dept. of Education

ROBERT SWAN
California State University, Long Beach

NEIL CAREY
Maryland State Dept. of Education

NANCY SCHLOSSBERG
University of Maryland

JAMES MAHRT
Michigan State Dept. of Education

GARRY WALZ
University of Michigan

TOM MOCK
Missouri State Dept. of Education

NORM GYSBERS
University of Missouri

DAVE PRITCHARD, *Project Monitor*
U.S. Office of Education

G. BRIAN JONES, *Responsible Investigator*
American Institutes for Research

H. B. GELATT, *Project Director*
American Institutes for Research

ESTABLISHING A CAREER RESOURCE CENTER

Clella Klinge
Cypress Community College

Neal Rogers
Santa Ana Community College

Robert A. Wood
Cypress Community College

December 1976

Developed by the National Consortium on Competency-Based Staff Development, in cooperation with the American Institutes for Research, under support by the United States Office of Education, Department of Health, Education, and Welfare under Part C of the Vocational Education Act of 1963.

Edited by Margaret Gerlach and Robert Swan. Typed by Catherine Swan.

Support for these efforts was received through the United States Office of Education, Department of Health, Education, and Welfare, under Part C of the Vocational Education Act of 1963. Points of view or opinions stated do not necessarily represent U.S.O.E. position or policy.

TABLE OF CONTENTS

	Page
Introduction	
Module Goal and Objectives	1
Glossary	2
Overview of a Career Resource Center	4
Activity One	13
Overview of a Systematic Approach to Establishment or Improvement of a Career Resource Center	14
Activity Two	15
Need Assessment - Step One	16
Activity Three	18-19
Write Objectives - Step Two	20
Activity Four	24
Identify Programs, Activities, Services - Step Three	25
Activity Five	27
Activity Six	28-29
Analyze Requirements and Choose P/A/S for Implementation - Step Four	30
Activity Seven	33-36
Identify Implementation Tasks - Step Five	37
Activity Eight	38-39
Assign Responsibility - Step Six	40
Activity Nine	41
Review of the Systematic Process and of Evaluational Procedures for Establishment or Improvement of a Career Center	42
Activity Ten	43

TABLE OF CONTENTS (Continued)

	Page
Evaluation	44
Bibliography	47
Appendix	49

INTRODUCTION

MODULE GOAL AND OBJECTIVES

This module is directed toward working guidance personnel in school settings, grades 7-14, including counselors, administrators, and career specialists. The topic is the founding and/or improvement of Career Resource Centers and the module focuses on a systematic process of implementing this objective. Participants will review the concept of a Career Resource Center, how to identify needs and determine objectives, and learn how to establish priorities, select programs and implement plans. On completion of this module, participants will be able to:

	Approximate Time
1. Describe the five components of a Career Resource Center (CRC) and list the steps of a systematic process for the establishment and/or improvement of a CRC.	*90 minutes*
2. Choose a student sub-population to be served by the information component of a CRC in his/her own setting, identify needs of that sub-population and write objectives responding to those needs.	*90 minutes*
3. Choose three Programs/Activities/Services (P/A/S) which implement one of three objectives from #2, analyze requirements for each of the P/A/S chosen, and assign priority for implementation.	*90 minutes*
4. Identify and sequence the tasks necessary to implement the first priority P/A/S and construct a chart designating who is responsible for completing the tasks.	*60 minutes*

GLOSSARY

Career - The pattern of activities and experiences that make up a lifetime of work, learning, and leisure. The term is broadly defined to include occupational and educational choices and patterns as well as other aspects of a person's life--his/her personal and social behavior, learning to learn skills, social responsibility, citizenship and use of leisure time.

Career Counselor - A professionally trained counselor who has expertise in the field of careers through experience and specialized training.

Career Development - The life-long process a person undergoes as s/he gains skills in setting goals and in developing, implementing, evaluating, and revising plans to define a career and deal with life problems and opportunities.

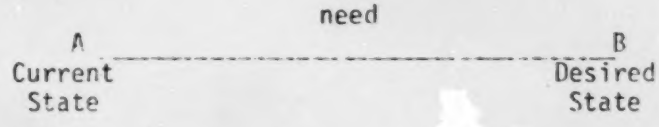
Career Education - The totality of experience through which one learns about and prepares to engage in work as part of her/his way of living.

Career Guidance - The various types of assistance provided to help individuals in their career development. It may include instruction, counseling, placement, follow-through, evaluation, and support procedures based on career planning and development needs.

Desired Outcomes - The products and goals of a theoretically perfect program which completely satisfies all client needs and wants. Answers the question: Where do we (providers and clients) want to be?

Formative Evaluation - A process of collecting and using information during program development in order to improve the functioning of the program.

Need - This term usually applies to individuals, but programs may be considered to have needs also. In either case, a need is the gap between the current state and the desired state. The concept may be represented graphically. If point A is where someone is, and Point B is where he would like to be, the gap between these two points is the need.



In terms of career guidance, counseling, placement, and follow-through programs, "A" represents the program's current status and "B" its desired outcomes. Again, the "need" is the difference between A and B.

Outcome - The terminal behavior sought in a performance objective. Differentiated from the other three parts of an objective (audience, conditions, and degree).

Performance (or product) Objective - A specific, behaviorally stated and measurable or observable outcome. It should include the target population, the observable or measurable outcome, the conditions under which it will be measured, and criteria that will be accepted to indicate that the objective has been achieved. (Example: "Given a small group discussion situation, by the end of the year each eighth grade student will have made an effort deemed satisfactory by his teacher, according to defined criteria, to encourage participation from another group member at least twice during a half-hour period.")

Process Objective - A program activity which contributes to reaching a product objective. (Example: "High school teachers will present one career education lesson per week related to the topic of their class.")

Program Goal - A general, broad statement of program purpose, as opposed to performance objectives, which are specific and behavioral. (Example: To help students increase their knowledge of the world of work.")

Summative Evaluation - A process of collecting information to facilitate judgments about the overall worth of a program; especially appropriate to later implementation stages.

OVERVIEW OF A CAREER RESOURCE CENTER

AN OVERVIEW

As a part of the response to the demand for relevancy, the need to integrate school and work, and the whole career education movement, many schools and college guidance systems have incorporated the concept of career development into their programs. They have recognized that career development is a life-long, on-going process. Through career development, individuals develop skills in goal setting, planning, and decision making, and in implementation planning. The goal of the career development process is a planned and satisfying career or life rather than an accumulation of haphazard occurences.

Career Development

The complexity of the career development process has created the need to establish multi-faceted programs. The most common of these are Career Guidance Centers, Career Information Centers, and Career Planning Centers that have sprung up throughout the United States. Even though these programs have been more extensive than the traditional guidance programs, their response to the rapidly changing society and its demands upon individuals is still limited. This has led to the growth of the concept of a comprehensive Career Resource Center (CRC). A CRC utilizes a number of components each of which offer a variety of programs, activities, and services to meet specific needs. In addition, it serves as a resource to instructors, counselors, administrators and other change agents as

Career Resource Center

well as the community and students.

A full-service CRC, then, includes the following components:

Five Components

(1) Education, work, and leisure information
(2) Self-assessment materials
(3) Education and work placement services
(4) Teacher resource materials
(5) Career counseling and guidance services

Because it has been difficult for many counseling programs to keep up with this rapid change, a specific institution may have one or more components, either partially or totally developed. Others may not have any of the components. This is probably why you are attending this workshop -- to find ways to develop activities and services which are responsible to the needs of your students, instructors, and possibly other members of your community.

In a recent study sponsored by the California State Department of Education a task force prepared a comprehensive overview titled *Career Centers in California* (Jacobson, 1975). It is recommended that you read this work prior to implementing your CRC. Recommendations by the task force have been included in the Appendix for the following areas: "How to Implement a Career Center;" "How to Operate and Maintain a Career Center;" "How to Improve a Career Center."

Career Centers in California

Each component of the CRC meets particular needs of specific sub-populations. In addition each component is interrelated with the other four areas. The total degree of success of your program, in part, depends on how many

of these components are implemented on your campus. Program continuity is enhanced by coordinating each component within one Center. Please note that while the CRC serves as the nucleus of all programs, many of the activities of the CRC take place in the classroom, in work stations, and in the community.

Program Continuity

The ultimate success of a CRC depends on the proper selection of personnel. Career Counselors, Career Resource Technicians, Career Resource Aides, Work Experience Coordinators, Media Resource and Instructional Specialists, are only a few examples of types of personnel which may function within the umbrella of the CRC.

CRC Personnel

Each component of the CRC is designed to meet specific needs, to serve certain populations, and provide activities and programs to assist each individual on his/her career development journey. The following brief narrative is designed to give a better understanding of each component of a full service CRC.

Education, Work and Leisure Information Component

An important requirement in any decision making model is the availability of accurate and reliable information on which to base decisions. The career information component provides a variety of materials organized in a meaningful and manageable manner to meet this requirement. This is usually accomplished by adopting some type of cluster system. This permits each individual to explore,

both horizontally and vertically, career options available within a career cluster.

Types of information included in the information component are:

Types of Informa

- Labor market trends and local job requirements
- Information on job related skills for obtaining employment
- Information about training agencies (college, proprietary schools, armed forces, etc.)
- Career briefs on numerous occupations (demand, compensation, training, promotion possibilities, etc.)
- Media materials (filmstrips, tape-slide, video cassettes, sound-slide) covering a multitude of topics regarding specific careers or career clusters.

The following examples illustrate the informative component of the CRC:

Information Compon in Action

Seventh grade students participate in a small group activity to learn about career clusters.

Eleventh grade students identify three related careers, selected on the basis of interest and ability, for a detailed examination of the characteristics of each career.

First year women in a community college enroll in a career planning class which emphasizes non-traditional career opportunities for women.

High school business majors attend a seminar on career opportunities in the world of business.

A senior in high school discusses her long range life and career goals with a career counselor. A plan of action is developed as a result of the session.

A ninth grade social studies class views a filmstrip on the jobs of the 80's followed by students completing an activity packet.

A mature adult (40 years of age) discusses with a Career Counselor the need to change careers in mid-life and available options.

Self-assessment Component

All people are faced with seeking answers to two

important life questions: Who am I? Where am I going? The self-assessment component is designed to assist individuals in obtaining answers to these questions. This diagnostic component contains material which may be used to assess interest areas and personality characteristics, achievement, aptitude, intelligence, experience, values, skills, leisure needs. A variety of activities sponsored by this component provides a means of facilitating an understanding self and is an essential step in the career development process.

Types of Materials

Types of materials which could be located in this component might include:

Interest inventories (e.g. California Occupational Planning Survey, Self-Directed Search, Strong-Campbell, Kuder, Job-O).

Achievement tests (e.g. reading, math.)

Abilities assessment tools (e.g. Iowa Tests of Educational Development, Differential Aptitude Tests, American College Tests, Scholastic Aptitude Test).

Self-developed life assessment materials.

Sample Activities

Programs and activities which would be sponsored by this component might include:

- High school students who have been identified as potential drop-outs have skills diagnosed and proper referral made if needed (e.g. reading lab or writing lab).
- Ninth grade students are given interest inventories (mutual selection and agreement of need by student and counselor) followed by a small group interpretation and discussion
- Seniors in high school enroll in a decision-making class to better understand self and how to make good decisions.
- Freshmen in college participate in a growth group

designed to help each person better understand self and others.

- Seventh grade students (small groups) participate in a simulation game designed to clarify values.

- A high school student discusses implication of ability test results with a counselor exploring values, life and educational goals.

Work Experience Component

It is a known fact that most of us, women and men, will work in the labor force for a significant part of our lives. More often than not, people are unaware of the opportunities and demands within the world of work. Programs and activities within this component meet a variety of needs which include:

Programs and Activities

Exploratory work experience. Students are given an opportunity to work at several different work stations in order to become more knowledgeable of types of jobs and demands.

Occupational work experience. Students work in jobs and take related courses, establish objectives for semester, and periodically meet with the coordinator, individually and in groups, for discussion and feedback.

Job acquisition skills. Students are given an opportunity to participate in Work Experience Seminars on topics like: (1) "Job Prospecting-Where Are They?", (2) "How to Complete an Application," (3) "How to Write a Resume," (4) "The Job Interview," (5) "Keeping the Job." In addition, video role playing and simulations can further enhance the effectiveness in this area.

Part-time, full-time placement. A valuable service of this component is providing a listing of available part-time and full-time employment opportunities. The work experience coordinator on staff would screen all applicants being referred for an interview. Students not prepared for the interview (apperarance, interview skills, confused) would be worked with individually and/or in regularly scheduled "Job Acquisition Seminars". This type of activity

enhances the long range development of students.

Volunteer Bureau. Experience is a valuable learning tool but cannot always be gained by paid, part or full-time work. A valuable service of this component is the Volunteer Bureau. Organized as a public service program, students may volunteer to work in a variety of settings for the experience and people contact. Contact classes or discussion groups can be held to capitalize on these important experiences.

Career Days. Regularly scheduled Career Days brings on campus authorities in particular specialities to speak first hand with students and to directly relate what industry is seeking in potential employees. Career Days may be organized around clusters, academic divisions, or specific careers. They should be well coordinated with the information component.

Instructor Resource Component

Career education is a campus responsibility. The concept of career education embraces students from K-Adult and involves the instructional staff incorporating these concepts into the daily classroom routine. The Instructor Resource Component is designed to assist instructors in the selection of materials appropriate for their classes. In addition, specialized counselors serve as resource people in discussing learning strategies which might best be utilized in specific learning environments. This component would have study areas for instructors, preview rooms for audio-visual or other materials, and conference rooms for case studies or brainstorming sessions.

Career Activity Packages

Career activity packages, prepared for numerous topics would be jointly developed by instructors and counselors. Each package would focus on a specific objective and include the following items:

- Outcome statements
- Materials required for the activity
- Suggested strategies for implementation
- Assessment techniques to measure student performance

Examples of career activity packages might include:

Subject Matter for CAPS

- Career opportunities in subject fields (e.g. math, English, science)
- Simulation games to identify individual value structures
- Improvement of listening skills
- Tips in finding that first job
- Teaching the decision-making model
- Exploration of educational opportunities (college, graduate schools)
- How to apply for financial aid and scholarships
- Career planning - selecting a career
- Effective study techniques

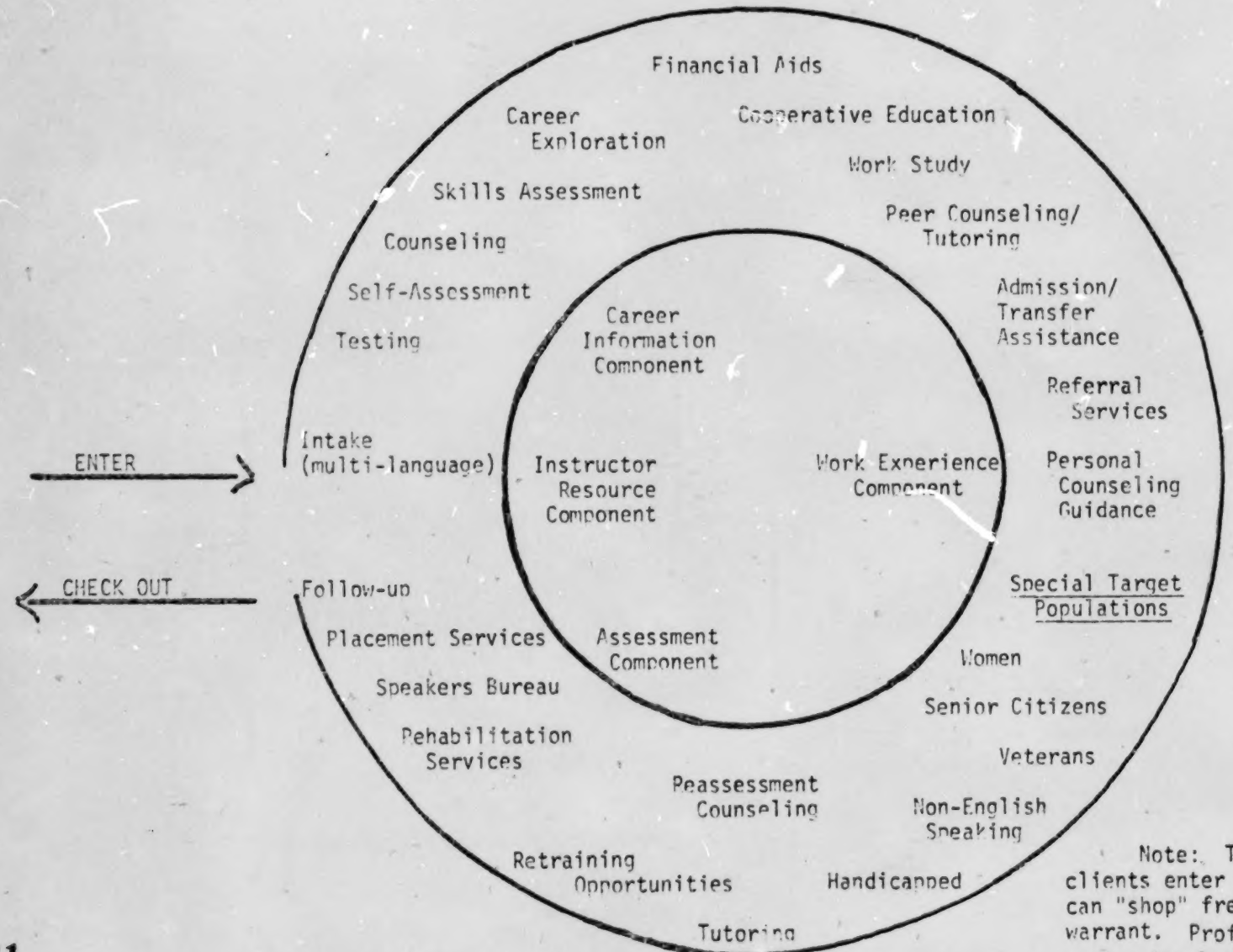
Career Counseling and Guidance Component

The purpose of a CRC is not only to offer information and service to answer questions, but to stimulate further thinking. The career specialist directing the CRC should be housed there so that s/he can be available to work with individuals and groups in career planning and decision-making skills. Also s/he would facilitate infusion of career education concepts into the curriculum along with acting as the resource person for the instructional component.

Each component may function independently. All components needed in a particular setting are inter-related and enhance the total career development program. The chart which follows titled "Comprehensive Career Resource Center" may help you visualize the many functions identified with a fully functioning center.

COMPREHENSIVE CAREER RESOURCE CENTER (CRC)

A Career Guidance Supermarket Model



Note: The idea being that all clients enter in one place, but they can "shop" freely as their needs warrant. Professional or para-professional help is always available throughout the CRC.

Activity One

List the components of a Career Resource Center and two activities that are typical of each component.

1. Component _____

_____

Activities:

a. _____

b. _____

2. Component _____

_____

Activities:

a. _____

b. _____

3. Component _____

_____

Activities:

a. _____

b. _____

4. Component _____

_____

Activities:

a. _____

b. _____

5. Component _____

_____

Activities:

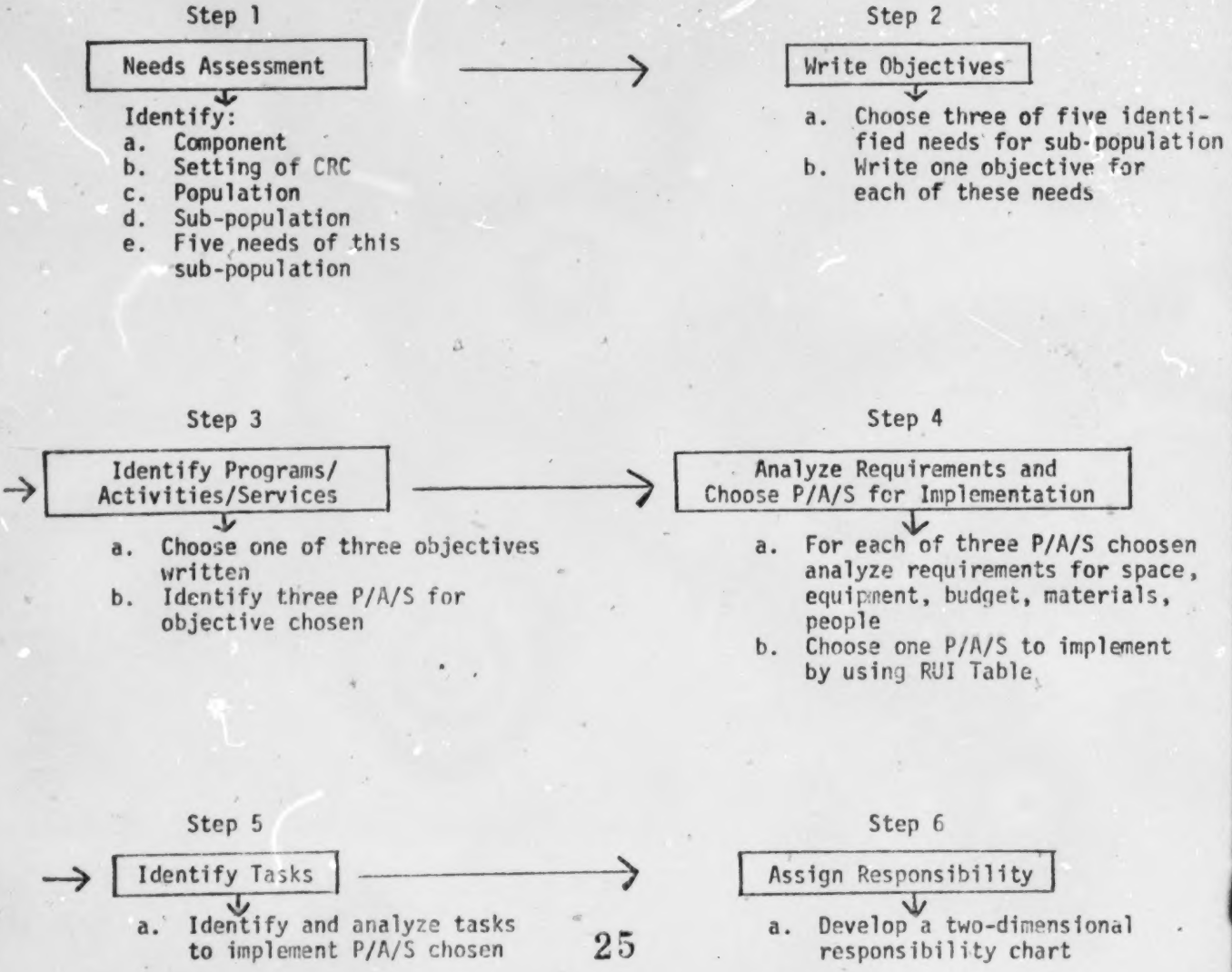
a. _____

b. _____

OVERVIEW OF A SYSTEMATIC APPROACH TO ESTABLISHMENT OR IMPROVEMENT OF A CAREER RESOURCE CENTER

The use of a systematic approach can enhance your chances of establishing or improving a career resource center. The flow chart identifies the steps of a systematic approach as well as the activities you will complete for each step as a part of the workshop.

FLOW CHART OF A SYSTEMATIC APPROACH TO ESTABLISHMENT OR IMPROVEMENT OF A CAREER RESOURCE CENTER


Step 1
Needs Assessment
Identify:
a. Component
b. Setting of CRC
c. Population
d. Sub-population
e. Five needs of this sub-population
Step 2
Write Objectives
a. Choose three of five identified needs for sub-population
b. Write one objective for each of these needs
Step 3
Identify Programs/ Activities/Services
a. Choose one of three objectives written
b. Identify three P/A/S for objective chosen
Step 4
Analyze Requirements and Choose P/A/S for Implementation
a. For each of three P/A/S choosen analyze requirements for space, equipment, budget, materials, people
b. Choose one P/A/S to implement by using RUI Table
Step 5
Identify Tasks
a. Identify and analyze tasks to implement P/A/S chosen
Step 6
Assign Responsibility
a. Develop a two-dimensional responsibility chart

Activity Two

List in sequence, at least five of the six steps of a systematic approach to establish or improve a CRC.

1.

2.

3.

4.

5.

6.

NEEDS ASSESSMENT

Step One

NEEDS ASSESSMENT

Programs and services should be developed as a result of a particular need. Administering a needs assessment instrument to find out the career needs of a particular audience, such as students, is alot of work. Constructing questions whose answers will really give you what you want is not an easy task. The preparing, duplicating, distributing, and collecting of this instrument means calling on other people for help.

Difficult but Necessary Task

Leadership in bringing about a needs assessment might come from several sources depending upon the extent of the assessment. The head counselor, vice-principal in charge of guidance services or dean of students, might be the facilitating force for a needs assessment dealing with career needs, career planning and career experience.

Leadership

Evaluating and utilizing the results is important. An advisory committee made up of community members as well as school people, can help in giving priority to the needs expressed and in suggesting programs to help meet these needs. The community members can also serve as disseminators of the committee's deliberations, and seek community support of the programs created to meet expressed needs.

Advisory Committee

Because needs assessment is a complex process, and could be a workshop in itself, you are being asked to select the needs in your particular setting for the purpose of the learning experience.

Structure for Micro Process

First of all, to facilitate our micro process we are designating the information component as the one we will use. There is always room for improvement in this component because communicating a sufficient base of career information for wise decision-making is an involved task. It is assumed that your setting will be your own school or one with which you have familiarity.

The next step is to designate the target population. To further facilitate the micro process, students are being chosen rather than teachers or parents because they are the main audience of a CRC. An additional step is having a sub-population. This could be a grade level, boy or girl, departments, etc. The basis of your choice should be that student group which is receiving the least service from the information component. Finally, list five informational needs which you think are existant in the sub-population you chose.

Activity Three

a. Identify and describe the setting you have chosen for your CRC for this workshop.

b. Identify population of your setting.

c. Identify sub-populations.

d. Choose one of the identified sub-populations for this workshop.

Activity Three (continued)

e. From you knowledge of your chosen sub-population make a list of five needs they might have. (In a real situation a needs assessment would be conducted by using questionnaires, interviews or combinations of survey techniques.) Remember, a need is the difference between what exists at present and what is desired.

* Example: Hawkins High School
  Sub-population: Seniors who wish to attend four year colleges
  Need: Information about four year colleges which match their individual objectives.

Five needs of chosen sub-population

(1) _____

_____

(2) _____

_____

(3) _____

_____

(4) _____

_____

(5) _____

_____

WRITE OBJECTIVES

Step Two

SPECIFYING PERFORMANCE OBJECTIVES

An integral step in developing a Career Resource Center (CRC) is specifying performance objectives. Since this workshop is concentrating on the process of developing a CRC and not on teaching the process of writing comprehensive objectives, it is assumed that participants have had experience in this area. Therefore, the following material has been prepared to provide participants with a quick review of preparing objectives. For a detailed review of this topic, it is suggested that participants read the work of Harrison (AIR).

Why Write Objectives

Why Write Objectives

Programs are usually based on general, long range goals which are difficult to evaluate in terms of client behavior change. Objectives, on the other hand, are specific and are stated so that they are both measurable and quantifiable, and can be used to help determine whether or not the program goals have been reached.

Measurable and Quantifiable

Both government and the general public are demanding that school programs be accountable; the guidance area is no exception. School personnel, therefore, must specify desired changes in behavior, stated as performance objectives. This step facilitates measurement growth and change and it assists personnel in the selection of appropriate materials and methodologies.

Determining Student Outcomes

There are many different classification systems which may be used in writing objectives, e.g. Bloom's Taxonomy or the California Model. To attain both program continuity and a foundation for growth, it is imperative that you use a system.

Outcome Statements

Outcome statements. The key point to remember in preparing performance objectives is to identify behavior which will indicate that the client has reached the goal. Outcome statements should include the following:

- Outcomes should describe end results, not procedures or activities.
- Outcomes must be observable or measurable. (Therefore, use action verbs to avoid vague or ambiguous statements).
- Outcomes must be relevant to the goal.
- Outcomes must describe performance.
- Outcomes should be significant.

Other key points to remember:

- Consider subgroups and establish realistic level of achievement.
- While there is no formula for specifying the exact number of objectives to prepare, it is suggested that you think of as many outcomes as you can. Then prioritize and select outcomes related to program objectives. Also remember that selection of outcome statements must be limited to those which can effectively be coordinated.

Writing Full Objectives

Four Key Components

There are four key components which must be present in an outcome statement before it may be considered a full objective. It is not necessary for an objective to be limited to one sentence.

Population. Within the school setting there is a large population to be served. Yet, within that population there are many sub-populations (e.g. sex, race, age, grade level, learning level, developmental level). The first step in writing an objective is defining the population for which the objective is appropriate and intended. The objective should provide a detailed delineation of the population which is clear to the reader. Each sub-population may have different needs. Examples might include the following:

Population

> Women may need to have experiences related to becoming aware of non-traditional career opportunities. (Career Information Component)
>
> Seventh grade students, compared to seniors, need different types of programs and services as related to work experience. (Work Experience Component)

Behavior. A complete objective will include a statement using an action verb that will describe behavior which is observable and relevant to the goal. The following are action verbs which are useful in generating outcomes:

Behavior

choose	discriminate	discuss
describe	relate	construct
list	design	make
define	compare	match
record	draw	identify
apply(use)	demonstrate	recognize
interpret	predict	name
contrast	separate	operate

Action Verbs

Condition. Condition refers to the setting or situation in which the outcome will be measured. Thus the statement must include a brief description of the condition in which the person will be expected to perform

Condition

the stated objective. Condition refers to the test conditions or parameters which will be established.

Examples of test conditions are: *Examples*

- After individually reviewing three occupations as discussed in the *Occupational Outlook Handbook* . . . (Career Information Component)
- As a result of a small group discussion on interest inventories . . . (Assessment Component)
- After listening to a cassette tape of the procedures to follow in completing a job application . . . (Work Experience Component)
- Upon completing a Career Activity Package in a social science classroom . . . (Instructor Resource Component)

In determining the conditions attempt to:

(1) Specify the information, tools, equipment, source materials, and anything else which will be available to help perform the outcome specified in the objective.

(2) Try to select conditions which most closely resemble a real-life situation in which the person might be required to perform the behavior. (Harrison, AIR)

Criterion of evaluation. A complete objective will state how effectively a person must perform to demonstrate adequate mastering. It establishes the degree of success. Criteria statements may be both quantitative (minimum number, percent, time limitations, etc.) and/or qualitative (satisfactory, acceptable, significant). Qualitative objectives are usually less precise. *Criterion of Evaluation*

There are references which can be of help listed in the bibliography.

Activity Four

Choose three of five needs written for sub-population and write one objective for each need.

Note: See Glossary: "Performance or product objective."

Need #1 _____

_____

Objective #1 _____

_____

_____

_____

_____

_____

Need #2 _____

_____

Objective #2 _____

_____

_____

_____

_____

_____

Need #3 _____

_____

Objective #3 _____

_____

_____

_____

_____

_____

IDENTIFY PROGRAMS, ACTIVITIES, SERVICES (P/A/S)

Step Three

DESCRIPTION OF PROGRAMS, ACTIVITIES, AND SERVICES

Programs, activites, and services can be described as follows:

Programs are developmental series of individual and group activities presented in sequence. These might include a weekly or monthly program of "Spotlights on Careers" (speakers from business and industry), seminars on job search (filling out applications, interviewing, developing contacts, communication skills, appearance), and in-service workshops to extend the knowledges, skills, and techniques of teachers, counselors, and paraprofessionals.

Programs

Activities include, but are not limited to, individual and group experiences in the classroom, Career Resource Center, and community. For example, group experiences might include seminars on occupational clusters, presentations to classes on specific occupations, College Days, Career Days, and visitations to business and industry. Individual activities might include simulation games and occupational kits, tests or inventories, and interviews.

Activities

Services are support activities provided primarily by Career Resource Center staff and may include but are not limited to the following: occupational or career presentations in classes, presentations to community organizations and service clubs, audio visual and printed packages that can be used directly by instructors and others, counseling and instruction in the Career Resource

Services

Center for student groups and individuals.

In considering programs, activities or services be creative. When considering space, materials, budget, equipment and people do not overlook resources because they are not readily available. The following questions are meant to act as spurs to your creative thinking.

Questions for Creative Thinking

Can you involve instructors, parents, students, administrators, non-certificated personnel, members of the community in some significant way?

Is financial assistance available from non-school sources? (i.e. business groups)

Can facilities currently being used be reassigned? Are there any portable buildings in the district (i.e. trailers) available for your use?

Are there viewers, readers, tape recorders, typewriters or other equipment standing idle in some department that may be borrowed for the CRC?

Are there materials already developed that may be either free or inexpensive? Are these available from faculty, local business and industry, the local Chamber of Commerce, business clubs?

Activity Five

Choose one objective of the three written and identify three programs or activities or services to accomplish this objective.

Objective chosen is _____

_____

_____

Three programs, activites, services to accomplish this objective are:

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

Activity Six

Analysis of requirements for P/A/S

P/A/S #1 (identify) _____

_____

Requires:

People

Space

Equipment

Funding

Materials

P/A/S #2 (identify) _____

_____

Requires:

People

Space

Equipment

Funding

Materials

Activity Six (continued)

P/A/S #3 (identify) _____

_____

Requires:

People

Space

Equipment

Funding

Materials

ANALYZE REQUIREMENTS AND CHOOSE P/A/S FOR IMPLEMENTATION

Step Four

One of the major problems in establishing a Career Resource Center (CRC) or in improving one component of a CRC is deciding what to do first.

One aid to help in making decisions about which programs, activities, or services to implement first is the RUI Table.* This technique requires you to indicate the resources necessary for implementation, to evaluate the difficulty in procuring the resource and to determine the importance of the resource to implementation. The Relative Unfavorable Impact (RUI) is the relationship between the difficulty in procuring the resource and its importance to implementation.

RUI Table

In using the RUI Table you are working with the most critical resources necessary for implementation. You will be choosing the three most critical resources under each category from your list of requirements prepared in the previous activity. Write these in the blank RUI Tables on the following pages for each of the three P/A/S's. As you identify resources needed be sure you do not overlook elusive resources, resources that are not obvious. These resources may be very critical to implementation.

Most Critical Resources

---

* The concept of Relative Unfavorable Impact (RUI) was initially developed by Ron Smith while at Cerritos Community College, Cerritos, California. He is currently at Cypress Community College. The RUI concept was modified for the purpose of this workshop.

You are now ready to determine the availability of each resource.

Utilizing the RUI Table

First consider those resources you currently have or know you can obtain without difficulty. These resources have no unfavorable impact on implementation and should be circled in the (1) or "none" column. Next consider the resources that you consider extremely difficult to obtain. These represent a serious unfavorable impact on implementation and should be circled in the (4) or "serious" column.

Between these two extremes there may be some possibility for obtaining a resource. These should be circled (3) or (4) depending on the difficulty you forsee at this time in obtaining the resource.

When you have completed a RUI Table, total the numbers by adding the columns, "none", "minor", "some" services. The program, activity, or service with the lowest relative unfavorable impact total should be the easiest to implement; thus, it would be the first one you could offer in the component you have chosen to develop. This does not mean, however, that this program/activity/service would necessarily be the only one you would initially offer or deliver. In fact, you will probably want to offer more than one program, activity or service within a component even during the beginning stages in order to have a viable program. To be sure the program/activity/service with the lowest total will be the easiest to offer, you will need to review your listing of the resources needed for that

program, activity, or service and your evaluation of both the availability and possibility of obtaining crucial resources. If there is a resource which you feel will be impossible to obtain and is crucial to have, you will need to consider the program/activity/service with the second lowest total.

Activity Seven

RUI TABLE
(Relative Unfavorable Impact)

PROGRAM/ACTIVITY/SERVICE #1: _____

Develop a checklist of one to three resources needed in each category to offer this program/activity/service and complete the relative impact column at this time.

POSSIBLE RESOURCES	RELATIVE UNFAVORABLE IMPACT				STRATEGIES
PEOPLE	NONE	MINOR	SOME	SERIOUS	
1.	1	2	3	4	
2.	1	2	3	4	
3.	1	2	3	4	
SPACE					
1.	1	2	3	4	
2.	1	2	3	4	
3.	1	2	3	4	
EQUIPMENT					
1.	1	2	3	4	
2.	1	2	3	4	
3.	1	2	3	4	
FUNDING					
1.	1	2	3	4	
2.	1	2	3	4	
3.	1	2	3	4	
MATERIALS					
1.	1	2	3	4	
2.	1	2	3	4	
3.	1	2	3	4	
	____	____	____	____	

Total of vertical columns — 48 = _____ Total of all four vertical columns

Activity Seven (continued)

RUI TABLE
(Relative Unfavorable Impact)

Program/Activity/Service #2: _____

Develop a checklist of one to three resources needed in each category to offer this program/activity/service and complete the relative impact column at this time.

POSSIBLE RESOURCES	RELATIVE UNFAVORABLE IMPACT				STRATEGIES
	NONE	MINOR	SOME	SERIOUS	
PEOPLE					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
SPACE					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
EQUIPMENT					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
FUNDING					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
MATERIALS					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
	____	____	____	____	

Total of vertical columns = _____ Total of all four vertical columns

RUI TABLE
(Relative Unfavorable Impact)

PROGRAM/ACTIVITY/SERVICE #3: _____

Develop a checklist of one to three resources needed in each category to offer this program/activity/service and complete the relative impact column at this time.

POSSIBLE RESOURCES	RELATIVE UNFAVORABLE IMPACT				STRATEGIES
PEOPLE	NONE	MINOR	SOME	SERIOUS	
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
SPACE					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
EQUIPMENT					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
FUNDING					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
MATERIALS					
1.	1	2	3	4	_____
2.	1	2	3	4	_____
3.	1	2	3	4	_____
	____	____	____	____	

Total of vertical columns = _____ Total of all four vertical columns

Activity Seven (continued)

Choose one P/A/S for implementation based on totals of RUI Tables.

Totals of four vertical columns

P/A/S #1_____

P/A/S #2_____

P/A/S #3_____

The program with the lowest figure should be the easiest to implement.

P/A/S chosen for implementation is:

_____

IDENTIFY IMPLEMENTATION TASKS

Step Five

Identify and Sequence Tasks

In analyzing the tasks necessary to implement the P/A/S chosen, the final objective is to have as complete a breakdown of tasks as is necessary without gaps. This is not usually possible to do in sequence. Something is almost always left out.

It is suggested therefore that no effort be made at first to sequence tasks. Instead, using 3x5 cards, write each task on one card AS IT OCCURS TO YOU. When you have several tasks identified, lay the cards on a table in a natural sequence. You will then notice gaps and these can then be filled in on 3 x 5 cards.

When you have a group of tasks in sequence list them in Activity Eight. You will then be ready to develop the two-dimensional responsibility chart in Activity Nine.

Activity Eight

IMPLEMENTATION TASKS

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Activity Eight (continued)

IMPLEMENTATION TASKS

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

ASSIGN RESPONSIBILITY

Step Six

In order to assign responsibility for tasks a two-dimensional chart is helpful. This chart can be a simple assignment of responsibility for several P/A/S's, or it can be a sophisticated chart which indicates, not only prime responsibility, but coordination and other personnel functions for all components in a comprehensive CRC.

For the purpose of this workshop you are asked to develop the two dimensions of a chart using tasks as the vertical dimension and personnel as the horizontal dimension.

Activity Nine

Assign tasks to those people whom you believe would have prime responsibility for completion of task. Indicate this with a symbol "X".

Example:

Task	CRT
Buy books	X

Tasks	Career Counselor	Career Resource Technician	Career Aides	Counselors	Administration	Teachers	Other Staff	Advisory Committee	P.T.A.	Service Clubs	Business Men	Unions	Armed Forces	Other
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														

Two-dimensional Chart Assigning Prime Responsibility for Completion of Task

REVIEW OF THE SYSTEMATIC PROCESS AND OF EVALUATIONAL PROCEDURES FOR ESTABLISHMENT OR IMPROVEMENT OF A CAREER RESOURCE CENTER

You have now completed a mini-review of the systematic process for establishing and/or improving a Career Resource Center. The last activity will be the identification of the six steps in the process.

One aspect which has been omitted from this review is evaluation.

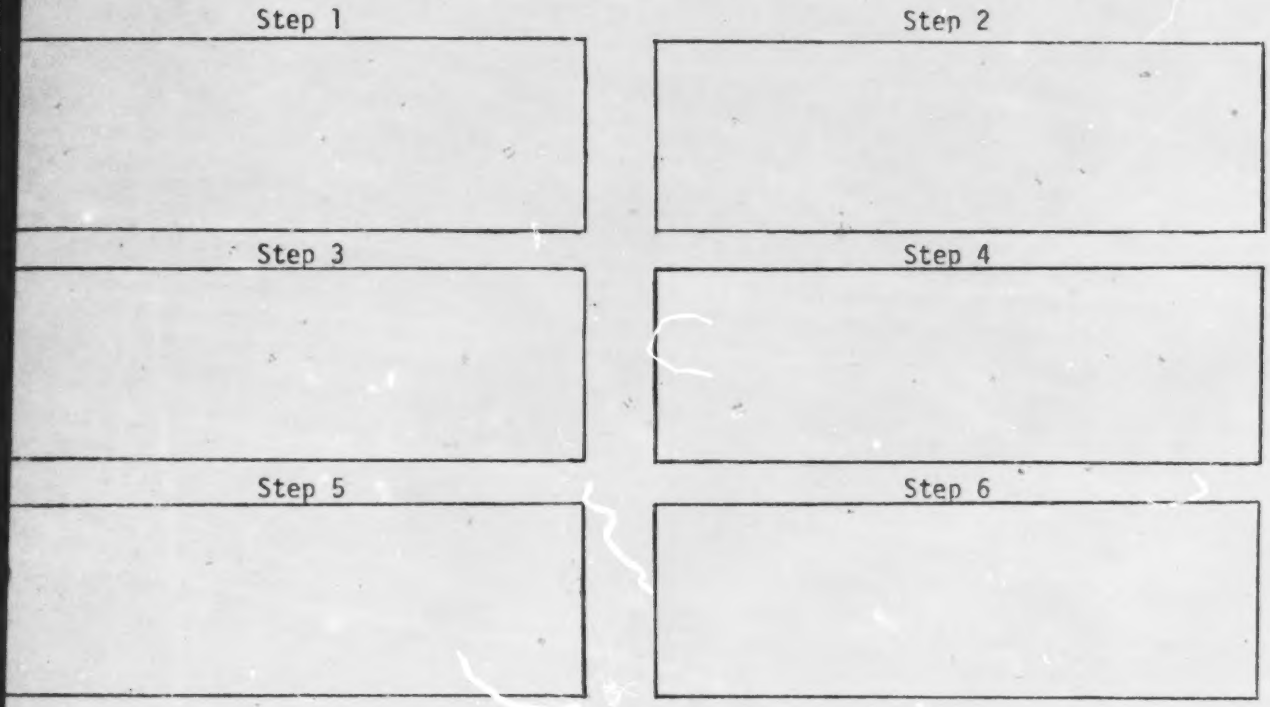
Evaluation

Evaluation should take place at each step in the process. In order to complete the process you will be given a brief review of evaluation strategies.

Activity Ten

Flow Chart of

A Systematic Process for Establishing and/or Improving A Career Resource Center



2. Note that evaluation takes place at each step. See review of evaluation strategies on following pages.

EVALUATION

Evaluation strategies ensure a systematic, planned process which measures the effectiveness of programs. The resultant data provides feedback concerning the total effectiveness of a program.

The majority of the data currently collected are administrative reporting summaries which do provide interesting descriptive information (e.g. staff assignments, number of staff, type of materials available, client data) yet this information is only meaningful from a subjective viewpoint.

Objective Evaluation

Objective evaluation provides program information on outcome attainment and behavior changes which result from specific activities. Specific statements of expected outcomes of a program and behavioral changes are a prerequisite to planning activites and to evaluating the effectiveness of the program.

Outcome-Referenced Evaluation

This module provides sequential activites designed to assist participants in developing a CRC based upon objectives. The criteria established in program objectives provides a means of evaluating programs on the basis of pupil attainment of specified outcomes.

Evaluation Procedures

(1) Concise statements of program objectives.
(2) Establishment of acceptable levels of attainment.
(3) Selection or development of materials and procedures to achieve outcomes.

(4) Identification of methods or instruments for assessing outcome attainment.
(5) Objective appraisal of outcome attainment.
(6) Identification of process variables related to attainment of specific outcomes. (O'Hare,1971)

Criterion Referenced Measures

Criterion-referenced measures (CRM) are used to compare client's attainment of desired outcomes with an established performance level. Criterion levels (minimal acceptable levels of performance) are established for each set of outcomes. CRM is appropriate when specific outcomes have been identified and instruction or guidance has been provided to develop the outcomes. CRM measures the degree of client attainment. Information derived from such evaluation models allows for systematic planning, program modification, and program verification.

Formative and Summative Evaluation

Formative Evaluation

The development stages of a program determines the evaluation emphasis and whether formative or summative evaluation will be utilized. Formative evaluation is a process of evaluating developing programs. Emphasis is on the degree to which program objectives are achieved by clients. You will recall that in developing objectives for each CRC component, that program objectives were also developed. The prime purpose of formative data collection is the identification of program strength and weaknesses. This is done by reviewing the program objectives. Analysis of the results of formative evaluation should include the consideration of situational variables (e.g. physical

setting). These outside variables may have a dramatic impact on the effectiveness of the program. The key point for you to remember is that formative evaluation is directed toward program improvement.

Summative Evaluation

Summative evaluation, on the other hand, is used to evaluate fully developed programs. Evaluation techniques are utilized which provide an estimate of overall program effectiveness. This procedure is used to evaluate individual programs or to compare two or more existing programs. Summative evaluation provides information about clients. Thus, the data may be utilized for client evaluation as well as program evaluation. In addition, summative evaluation is directed toward post-developmental evaluation and provides descriptive program-related statements that allow for comparison and decision-making.

This brief discussion was designed to serve as an overview of evaluation. Some resources for those desiring a more complete review of evaluation procedures and techniques are in the bibliography.

BIBLIOGRAPHY

American College Testing Program, Iowa City, 1976.

Briggs, Leslie J. *Handbook of Procedures for the Design of Instruction.* Pittsburgh: American Institutes for Research, 1970.

California State Department of Education, Bureau of Pupil Personnel Services. *A process guide for the development of operational objectives.* Sacramento, California, 1970.

Campbell, Robert E. "Applications of the Systems Approach to Career Guidance Programs". *Focus on Guidance,* Denver: Love Publishing Co., April, 1972.

Cunha, Joseph E. *Career Development: A California Model for Career Guidance Curriculum K-Adult,* California Personnel and Guidance Association Monograph #5, Fullerton, California, 1972.

Cutler, Arthur, et al. *Job-O.* Belmont, California: CFKR Career Materials, 1974.

Differential Aptitude Tests, New York: Psychological Corporation, 1972.

Harrison, Laurie. *Specifying Student Performance Objectives.* Developing Comprehensive Career Guidance Programs Module #6, Palo Alto, California: American Institutes for Research, 1975.

Holland, John L. *Self-Directed Search.* Palo Alto, California: Consulting Psychologist Press, 1970.

Iowa Tests of Educational Development, Chicago: Science Research Associates, 1971.

Jacobson, Thomas J., et al. *A Study of Career Centers in the State of California.* La Mesa: Grossmont Union High School District, 1975.

Johnson, C. D. and Carey, E. N. "Career Resource Centers." *Focus on Guidance,* Denver: Love Publishing Co., October, 1975.

Jones, G. Brian, et al. *A Manual for Developing Career Guidance Programs.* Irvine, California: Educational Properties Inc., 1974.

Kaufman, R. A. *Educational System Planning.* Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1972.

Kibler, R. J., Barker, L. L., and Miles, D. T., eds. *Behavioral Objectives and Instruction.* Boston: Allyn and Bacon, Inc., 1970.

Knapp, R. R., Grant, B., Demos, G. D.. *California Occupational Survey.* San Diego: Educational and Industrial Testing Service, 1966.

Krathwohl, D. R., Bloom, B. S., Masia, B. B. *Taxonomy of Educational Objectives.* New York: David McKay Co., 1964.

Krumboltz, J.D. *Stating the Goals of Counseling.* California Personnel and Guidance Association, Monograph #1, Fullerton, California, 1966.

Kuder, G. Frederic. *General Interest Survey, Form E.* Chicago: Science Research Associates, 1963.

Mager, Robert F. *Preparing Instructional Objectives.* Palo Alto, California: Fearon Publishers, 1962.

Mehlinger, H.D., and Patrick, J.J. "The use of formative and summative evaluation in an experimental curriculum project: A case in the practice of instructional materials evaluation." A paper presented to the Annual Meeting of the American Educational Research Association, New York City, March, 1970.

O'Hare, W. Robert and Lassen, Barbara. *Evaluating Pupil Personnel Programs.* California Personnel and Guidance Association Monograph #2, Fullerton, California, 1971.

Sanderson, Barbara and Helliwell, Carolyn. *Career Development Theory.* Developing Comprehensive Career Guidance Programs, Module #1, Palo Alto, California: American Institute for Research, 1975.

Scholastic Aptitude Test, Princeton: Educational Testing Service, 1976.

Strong Jr., E. K. and Campbell, D. P. *Strong - Campbell Interest Inventory.* Stanford, California: Stanford University Press, 1974.

APPENDIX

HOW TO IMPLEMENT, MAINTAIN, AND IMPROVE A CAREER CENTER

Thomas J. Jacobson
June 30, 1975

How to Implement a Career Center

Any approach to implementing a Career Center is dependent upon several pre-existing factors in a school: The degree of support from the administration, counseling staff, and faculty; the availability of funds; the availability of space; and the composition of the student body. If the individual or group of individuals in a school who are interested in beginning a Career Center are able to obtain substantial outright funding or total support from the principal at the outset, the process of implementing a Career Center is much simpler. However, since both of these situations represent the exception and not the rule, the following discussion addresses the "typical" situation in which a counselor or work experience coordinator would like to begin a Career Center but is not sure of the best way to proceed. The suggestions that follow will not apply to every secondary school, but it is hoped that most of the ideas can be adapted to fit particular situations.

1. Base the implementation of a Career Center on measured student need.
2. Develop an understanding of what Career Centers are currently doing to meet the career guidance needs of students.
3. Develop interest among the counseling staff, faculty, and students, and present the idea of a Career Center to the principal.
4. Take the principal, or the principal's designee, to an exemplary Career Center.
5. Free some time for a counselor to plan and organize a Career Center.
6. Set up a Career Center planning committee.

7. Allocate the space for a Career Center.

8. Decorate the center to achieve a non-institutional look.

9. Establish an inventory of printed sources of career and educational information.

10. Hire a paraprofessional to coordinate the day to day activities of a Career Center.

11. Before officially opening the center, have an orientation for the faculty.

12. Advertise the Career Center in the P.T.A. Newsletter, and in the local newspaper.

How to Operate and Maintain a Career Center.

Once a center is open, its success depends on the efforts and enthusiasm of the Career Center staff, and the atmosphere they are able to create in the center itself. In addition to these intangibles, the numbers and kinds of programs that are coordinated by the Career Center are directly related to the size and qualifications of the staff. Beyond these basic considerations, discussed in detail in Chapters II and III of the report, several generalizations can be made concerning the effective operation of a Career Center.

1. If it has not yet been done, writing objectives for the Career Center is the first order of business.

2. Take advantage of the resources of the school and the community.

3. View a Career Center as a process of inter-connecting, mutually supporting activities, with several points of entry.

4. Continue to develop support within the faculty, counseling staff and administration.

5. Act as a service to the faculty.

6. A minimum amount of career guidance for each student should be built into the Career Center program.

7. Maximize the effectiveness of career guidance services offered through the Career Center.

a. Interest Surveys
b. Speakers Programs and Field Trips
c. Work Experience

8. Files in the Career Center should be kept "for" and not just "on" students.

9. Career Center personnel should understand that career exploration does not necessarily lead to career planning.

10. Establish a budget specifically for the operation of the Career Center.

How to Improve a Career Center

To improve a Career Center, it is essential to obtain an evaluation on each aspect of a center's operation and to base arguments for further support on demonstrated past performance. In the discussion about evaluation, several different types of instruments were examined. The Career Center can use the information from these instruments plus feedback from other sources to help improve the programs and activities provided by the Career Center. The emphasis should be to examine programs and services offered and make decisions based upon data.

1. Establish priorities for each of the programs or activities provided by the Career Center.

2. Tentatively establish a one-year program, a two-year program, and a three-year program for the Career Center based upon established priorities and reasonable projections.

3. While the tentative programs are being laid out, discuss the programs with faculty members to see how they want to use the Career Center.

4. Meet with the counseling staff and obtain direct feedback from them to ensure that hteir ideas are incorporated into Career Center activities.

5. Obtain feedback information on the programs and services offered.

6. In Chapter VIII, ways in which Career Centers are making an impact on students were discussed.

7. Compare the Career Center priorities with the information from faculty and counselors and student input.

8. Examining priorities in relation to feedback is essential and much easier than it may seem.

9. Identify students who have not made any post-high school plans and seek to provide assistance to those students.

A Career Center in another district contacts all seniors who did not apply to college or who did not ask for their transcripts. Additionally, the Career Center should not automatically exclude students who say they are going to Community College from this group. Many students indicate they are going to college simply because they have not made any concrete plans about the future. Counselors at the Community College level mentioned that many students come to Community Colleges because they do not know what else to do and a significant number of these students drop out before too long.

This staff development booklet is part of a series of career guidance booklets developed by a four state consortium coordinated by the American Institutes for Research. Topics for staff development were determined by the results of a Career Guidance Staff Development Needs Survey administered in the four states. Each booklet will be field tested and revised. The total series is as follows:

CALIFORNIA

- Helping Elementary Students Understand Themselves - George Hurlburt, Jr.
- Helping Elementary Students Plan for the Future - Diane McCurdy
- Evaluating the Cost Effectiveness of Programs for Improving Interpersonal Skills - Milt Wilson
- Developing Facility Maintenance Competencies for Career Resource Center Technicians - Clarence Johnson
- Developing People Relationship Competencies for Career Resource Center Technicians - Jill Paddick and Dale Dobson
- Establishing a Career Resource Center - Robert A. Wood, Niel Rogers, Cella Clinge

MARYLAND

- Building Career Information-Seeking Behaviors - Richard H. Byrne
- Providing Life/Career Planning for Women and Girls - Janice M. Birk
- Utilizing Strategies for Adult Guidance - Zandy Leibowitz and Nancy Schlossberg
- Designing Programs for Adult Guidance - Zandy Leibowitz and Nancy Schlossberg

MICHIGAN

- Using Change Agent Skills to Manage Career Guidance Program Development - Juliet V. Miller
- Using Change Agent Skills to Manage Career Guidance Program Implementation - Juliet V. Miller
- Eliminating Stereotypes of Ethnic Minorities Through Career Guidance - Lois P. Brooks
- Developing Communication Skills and Program Strategies in Career Guidance for Ethnic Minorities - Lois P. Brooks
- Imaging Futuristic Career Guidance Goals - Juliet V. Miller, Garry R. Walz, and Libby Benjamin
- Imaging Futuristic Career Guidance Programs - Juliet V. Miller, Garry R. Walz, and Libby Benjamin

MISSOURI

- Planning Pre-Employment Programs - Joyce Fielding and Marvin Fielding
- Conducting Job Development Programs - Joyce Fielding and Marvin Fielding
- Conducting Job Placement Programs - Joyce Fielding and Marvin Fielding
- Conducting Follow-Up and Follow-Through Programs - Joyce and Marvin Fielding
- Developing Effective Public Relations - Norman C. Gysbers

AMERICAN INSTITUTES FOR RESEARCH

- Providing Career Guidance for Young Women - Pamela G. Colby
- Providing Guidance Services for Students With Physical Disabilities - Susan L. McBain
- Developing and Conducting In-Service Programs - Al Stiller
- Helping Students Explore Work and Leisure Options - Pamela G. Colby
- Helping Students Develop Career Decision Making Skills - Ellen A. Stewart
- Providing Guidance Services for the Elderly - Ellen A. Stewart